STIC Search Report
Biotech-Chem Library

9 4636
94636

STIC Database Tracking Number: 94636

TO: Padmavathi Baskar **Location:** CM1-8E12 Wednesday, May 21, 2003 **Case Serial Number:** 10/066551	**From:** Beverly Shears **Location:** Biotech-Chem Library CM1-1E05 **Phone:** 308-4994 beverly.shears@uspto.gov

Search Notes

Search and Information Resources Administration

Baskar, P.
10/066551

- key terms

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     FILE 'REGISTRY' ENTERED AT 12:02:02 ON 21 MAY 2003
                  E PROTEIN P177/CN
L3             1 S E4
                  E PROTEIN P88/CN 5
L4             1 S E4
                  E PROTEIN P64/CN 5
L5             1 S E5
                  E PROTEIN P55/CN 5
L6             1 S E6
                  E PROTEIN P46/CN 5
L7             1 S E10
L8             5 S L3 OR L4 OR L5 OR L6 OR L7

     FILE 'HCAPLUS' ENTERED AT 12:03:35 ON 21 MAY 2003
L1          4102 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (NEISSER? OR N)(W)GONORR
                  H?
L2             3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 AND (P177 OR P88 OR
                  P64 OR P55 OR P46)


L3             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "PROTEIN P177 (NEISSERI
                  A GONORRHOEAE)"/CN
L4             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "PROTEIN P88 (NEISSERIA
                   GONORRHOEAE)"/CN
L5             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "PROTEIN P64 (NEISSERIA
                   GONORRHOEAE)"/CN
L6             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "PROTEIN P55 (NEISSERIA
                   GONORRHOEAE)"/CN
L7             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  "PROTEIN P46 (NEISSERIA
                   GONORRHOEAE)"/CN
L8             5 SEA FILE=REGISTRY ABB=ON  PLU=ON  L3 OR L4 OR L5 OR L6
                  OR L7
L9             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8


L10            3 S L2 OR L9

L10  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:594879  HCAPLUS
DOCUMENT NUMBER:          137:168251
TITLE:                    Vaccine and complement CR3 antagonists for the
                          prevention and treatment of gonorrhea
INVENTOR(S):              Apicella, Michael A.; Edwards, Jennifer L.;
                          Gibson, Bradford W.; Scheffler, Karoline; Brown,
                          Eric
PATENT ASSIGNEE(S):       University of Iowa Research Foundation, USA;
                          University of California
SOURCE:                   PCT Int. Appl., 130 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ----------------  ----  --------      ---------------  --------
     WO 2002060936      A2   20020808      WO 2002-US2881   20020131
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-266070P P 20010131
US 2001-310356P P 20010806
US 2001-344452P P 20011023

AB The present invention is directed to polypeptides, polynucleotides and vaccines for use against **Neisseria gonorrhoeae** colonization or infection. In addn., the use of antagonists of complement receptor CR3 is demonstrated.

IT **446081-39-6**, Protein **p177** (**Neisseria gonorrhoeae**) **446081-41-0**, Protein **p88** (**Neisseria gonorrhoeae**) **446081-43-2**, Protein **p64** (**Neisseria gonorrhoeae**) **446081-45-4**, Protein **p55** (**Neisseria gonorrhoeae**) **446081-47-6**, Protein **p46** (**Neisseria gonorrhoeae**)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; vaccine and complement CR3 antagonists for the prevention and treatment of gonorrhea)

L10 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:344861 HCAPLUS
DOCUMENT NUMBER: 131:4240
TITLE: Immunoglobulin molecules having a synthetic variable region and modified specificity
INVENTOR(S): Burch, Ronald M.
PATENT ASSIGNEE(S): Euro-Celtique, S.A., Bermuda
SOURCE: PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9925378	A1	19990527	WO 1998-US24302	19981113
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2309990	AA	19990527	CA 1998-2309990	19981113
CA 2310269	AA	19990527	CA 1998-2310269	19981113
WO 9925379	A1	19990527	WO 1998-US24303	19981113

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9914597	A1	19990607	AU 1999-14597	19981113
AU 9914598	A1	19990607	AU 1999-14598	19981113
AU 737457	B2	20010823		
EP 1030684	A1	20000830	EP 1998-958584	19981113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
EP 1032420	A1	20000906	EP 1998-958583	19981113
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001526021	T2	20011218	JP 2000-520811	19981113
BR 9815289	A	20011226	BR 1998-15289	19981113
BR 9815580	A	20020129	BR 1998-15580	19981113
JP 2002507544	T2	20020312	JP 2000-520812	19981113
ZA 9900048	A	19990708	ZA 1999-48	19990105
ZA 9900049	A	20000309	ZA 1999-49	19990105
US 2002028469	A1	20020307	US 2001-963232	20010926
WO 2003026879	A2	20030403	WO 2002-US27446	20020828

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:	US 1997-65716P	P	19971114
	US 1998-81403P	P	19980410
	US 1998-191780	A1	19981113
	WO 1998-US24302	W	19981113
	WO 1998-US24303	W	19981113
	US 2001-963232	A	20010926

AB The invention provides modified Ig mols., particularly antibodies, that immunospecifically bind a first member of a binding pair which binding pair consists of the first member and a second member, which Igs have a variable domain contg. one or more complimentary detg. regions that contain the amino acid sequence of a binding site for the second member of the binding pair. The first member is a tumor antigen or an antigen of an infectious disease agent, and the second member is a mol. on the surface of an immune cell. The invention further provides for therapeutic and diagnostic use of the modified Ig.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:641431 HCAPLUS
DOCUMENT NUMBER: 126:4275
TITLE: Temperature- and medium-dependent secretion of proteins by Shiga toxin-producing Escherichia coli
AUTHOR(S): Ebel, Frank; Deibel, Christina; Kresse, Andreas U.; Guzman, Carlos A.; Chakraborty, Trinad
CORPORATE SOURCE: Inst. Medi. Mikrobiologie, Justus-Liebig-Univ., Giessen, D-35392, Germany
SOURCE: Infection and Immunity (1996), 64(11), 4472-4479
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Infections due to Shiga toxin-producing Escherichia coli (STEC) are responsible for severe diarrheal disease in humans and livestock, and these bacteria have recently emerged as a leading cause of renal failure in children. In this study, we have examd. medium- and temp.-dependent prodn. of secreted proteins from a STEC O26 serotype strain. Growth of bacteria in Luria broth led to the detection of secreted polypeptides of 104, 55, 54, and 37 kDa (p104, **p55**, p54, and p37, resp.). When grown in serum-free tissue culture medium, only p104, p37 and two addnl. polypeptides of 25 and 22 kDa (p25 and p22) were present in supernatant fluids. Prodn. of these polypeptides was growth temp. dependent and induced in cultures grown at 37.degree.. N-terminal amino acid sequencing revealed that p104 was homologous to the secreted p110 of enteropathogenic Escherichia coli (EPEC), and both proteins belong to a family of secreted proteins in pathogenic bacteria of which the IgA protease of **Neisseria gonorrhoeae** is the prototype. The N-terminal amino acid sequences of **p55** and p54 were unique to the STEC strain, while p37 and p25 were highly homologous to the similarly sized EspA and EspB proteins, previously detected in culture supernatants of EPEC. Mol. cloning and sequencing of STEC espB alleles from two different serotypes showed that the encoded polypeptides were about 80% homologous. A monoclonal antibody raised against STEC EspB also cross-reacted with its EPEC analog and allowed us to demonstrate medium- and temp.-dependent prodn. of this important virulence factor in STEC and EPEC strains of differing serotypes.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 12:05:49 ON 21 MAY 2003)
L11 5 S L10
L12 2 DUP REM L11 (3 DUPLICATES REMOVED)

L12 ANSWER 1 OF 2 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2002-619227 [66] WPIDS
DOC. NO. CPI: C2002-174981
TITLE: New polypeptide comprising **p177**, **p88**, **p64**, **p55** or **p46** from **Neisseria gonorrheae**, useful for preventing, or protecting a female patient against, **N. gonorrheae** colonization or infection.
DERWENT CLASS: B04 D16
INVENTOR(S): APICELLA, M A; BROWN, E; EDWARDS, J L; GIBSON, B W; SCHEFFLER, K

PATENT ASSIGNEE(S): (APIC-I) APICELLA M A; (BROW-I) BROWN E; (EDWA-I) EDWARDS J L; (GIBS-I) GIBSON B W; (SCHE-I) SCHEFFLER K; (REGC) UNIV CALIFORNIA; (IOWA) UNIV IOWA RES FOUND
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002060936	A2	20020808	(200266)*	EN	130

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002060936	A2	WO 2002-US2881	20020131

PRIORITY APPLN. INFO: US 2001-344452P 20011023; US 2001-266070P 20010131; US 2001-310356P 20010806

AN 2002-619227 [66] WPIDS

AB WO 200260936 A UPAB: 20021014
NOVELTY - A new polypeptide (P1) comprising **p177, p88, p64, p55** or **p46** from **Neisseria gonorrheae**, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a polynucleotide (N1) comprising a sequence encoding (P1);

(2) a vaccine (V) comprising (P1) that is operably linked to a transcriptional promoter and a non-toxic vehicle for immunizing a susceptible female patient against gonorrhea;

(3) a method of preventing, or protecting a female patient against, **N. gonorrheae** colonization or infection;

(4) an inhibitor (Ihb) comprising a recombinant murine I-domain from an alpha -subunit of a complement receptor type 3 (CR3) encoded by a sequence having 199 base pairs (bp);

(5) a nucleic acid (N2) encoding the recombinant murine I-domain;

(6) a composition (C) comprising the inhibitor (Ihb) and a carrier; or

(7) a method of inhibiting invasion of **N. gonorrheae** into a host cell in a patient.

ACTIVITY - Antibacterial.

Cervical cells were infected with 107 **N. gonorrheae** strain 1291. The results showed that as little as 1 ng of rI-domain gave over 90% inhibition of invasion of primary human ectocervical cells by **N. gonorrheae**.

MECHANISM OF ACTION - Vaccine; CR3-Inhibitor.

USE - The vaccine or the compound of the invention is useful for preventing, or protecting a female patient against, **N.**

gonorrheae colonization or infection (claimed).
Dwg.0/11

L12 ANSWER 2 OF 2 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 97045129 MEDLINE
DOCUMENT NUMBER: 97045129 PubMed ID: 8890194
TITLE: Temperature- and medium-dependent secretion of proteins by Shiga toxin-producing Escherichia coli.
AUTHOR: Ebel F; Deibel C; Kresse A U; Guzman C A; Chakraborty T
CORPORATE SOURCE: Institut fur Medizinische Mikrobiologie, Justus-Liebig-Universitat Giessen, Germany.
SOURCE: INFECTION AND IMMUNITY, (1996 Nov) 64 (11) 4472-9. Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-X96953; GENBANK-X99670
ENTRY MONTH: 199701
ENTRY DATE: Entered STN: 19970128
Last Updated on STN: 19970128
Entered Medline: 19970106

AB Infections due to Shiga toxin-producing Escherichia coli (STEC) are responsible for severe diarrheal disease in humans and livestock, and these bacteria have recently emerged as a leading cause of renal failure in children. In this study, we have examined medium- and temperature-dependent production of secreted proteins from a STEC O26 serotype strain. Growth of bacteria in Luria broth led to the detection of secreted polypeptides of 104, 55, 54, and 37 kDa (p104, **p55**, p54, and p37, respectively). When grown in serum-free tissue culture medium, only p104, p37 and two additional polypeptides of 25 and 22 kDa (p25 and p22) were present in supernatant fluids. Production of these polypeptides was growth temperature dependent and induced in cultures grown at 37 degrees C. N-terminal amino acid sequencing revealed that p104 was homologous to the secreted p110 of enteropathogenic Escherichia coli (EPEC), and both proteins belong to a family of secreted proteins in pathogenic bacteria of which the immunoglobulin A protease of **Neisseria gonorrhoeae** is the prototype. The N-terminal amino acid sequences of **p55** and p54 were unique to the STEC strain, while p37 and p25 were found to be highly homologous to the similarly sized EspA and EspB proteins, previously detected in culture supernatants of EPEC. Molecular cloning and sequencing of STEC espB alleles from two different serotypes showed that the encoded polypeptides were about 80% homologous. A monoclonal antibody raised against STEC EspB also cross-reacted with its EPEC analog and allowed us to demonstrate medium- and temperature-dependent production of this important virulence factor in STEC and EPEC strains of differing serotypes.

(FILE 'USPATFULL' ENTERED AT 12:06:39 ON 21 MAY 2003)
L14 1 S L1(S)(P177 OR P88 OR P64 OR P55 OR P46)
L15 0 S L8

L14 ANSWER 1 OF 1 USPATFULL
ACCESSION NUMBER: 2002:34310 USPATFULL
TITLE: Compounds

INVENTOR(S):	Black, Michael Terence, Chester Springs, PA, United States Hodgson, John Edward, Malvern, PA, United States Knowles, David Justin Charles, Boroughbridge, UNITED KINGDOM Nicholas, Richard Oakley, Collegeville, PA, United States Stodola, Robert King, Flourtown, PA, United States
PATENT ASSIGNEE(S):	SmithKline Beecham Corporation, Philadelphia, PA, United States (U.S. corporation) SmithKline Beecham plc., UNITED KINGDOM (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6348328	B1	20020219
APPLICATION INFO.:	US.1997-858207		19970514 (8)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Martinell, James
LEGAL REPRESENTATIVE:	Gimmi, Edward R., Deibert, Thomas S., King, William T.
NUMBER OF CLAIMS:	22
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT:	2021

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to newly identified polynucleotides, polypeptides encoded by such polynucleotides, the uses of such polynucleotides and polypeptides, as well as the production of such polynucleotides and polypeptides and recombinant host cells transformed with the polynucleotides. This invention also relates to inhibiting the biosynthesis or action of such polynucleotides or polypeptides and to the use of such inhibitors in therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.100
INCLS: 435/320.100; 435/252.300; 536/023.100; 536/023.700

NCL NCLM: 435/069.100
NCLS: 435/252.300; 435/320.100; 536/023.100; 536/023.700

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 12:09:29 ON 21 MAY 2003)

L16 1042 S "APICELLA M"?/AU
L17 16096 S "EDWARDS J"?/AU
L18 2667 S "GIBSON B"?/AU
L19 603 S "SCHEFFLER K"?/AU
L20 14434 S "BROWN E"?/AU
L21 2 S L16 AND L17 AND L18 AND L19 AND L20
L22 195 S L16 AND (L17 OR L18 OR L19 OR L20)
L23 14 S L17 AND (L18 OR L19 OR L20)
L24 2 S L18 AND (L19 OR L20)
L25 2 S L19 AND L20

- Author(s)

L27 396 S (L22 OR L16 OR L17 OR L18 OR L19 OR L20) AND L1
L28 2 S L27 AND (P177 OR P88 OR P64 OR P55 OR P46)

Searcher : Shears 308-4994

L29 1 S (L22 OR L16 OR L17 OR L18 OR L19 OR L20) AND L8
L30 14 S L21 OR L23 OR L24 OR L25 OR L28 OR L29
L31 6 DUP REM L30 (8 DUPLICATES REMOVED)

L31 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
ACCESSION NUMBER: 2002:594879 HCAPLUS
DOCUMENT NUMBER: 137:168251
TITLE: Vaccine and complement CR3 antagonists for the prevention and treatment of gonorrhea
INVENTOR(S): **Apicella, Michael A.; Edwards, Jennifer L.; Gibson, Bradford W.; Scheffler, Karoline; Brown, Eric**
PATENT ASSIGNEE(S): University of Iowa Research Foundation, USA; University of California
SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002060936	A2	20020808	WO 2002-US2881	20020131

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-266070P P 20010131
US 2001-310356P P 20010806
US 2001-344452P P 20011023

AB The present invention is directed to polypeptides, polynucleotides and vaccines for use against **Neisseria gonorrhoeae** colonization or infection. In addn., the use of antagonists of complement receptor CR3 is demonstrated.

L31 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 2
ACCESSION NUMBER: 2002:738942 HCAPLUS
DOCUMENT NUMBER: 137:231221
TITLE: A co-operative interaction between Neisseria gonorrhoeae and complement receptor 3 mediates infection of primary cervical epithelial cells
AUTHOR(S): **Edwards, Jennifer L.; Brown, Eric J.**; Uk-Nham, Sang; Cannon, Janne G.; Blake, Milan S.; Apicella, Michael A.
CORPORATE SOURCE: Department of Microbiology, The University of Iowa, Iowa City, IA, 52242, USA
SOURCE: Cellular Microbiology (2002), 4(9), 571-584
CODEN: CEMIF5; ISSN: 1462-5814
PUBLISHER: Blackwell Science Ltd.

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Little is known about the pathogenesis of gonococcal infection within the lower female genital tract. We recently described the distribution of complement receptor 3 (CR3) on epithelia of the female genital tract. Our studies further indicate that CR3-mediated endocytosis serves as a primary mechanism by which N. gonorrhoeae elicits membrane ruffling and cellular invasion of primary, human, cervical epithelial cells. We have extended these studies to describe the nature of the gonococcus-CR3 interaction. Western Blot anal. demonstrated prodn. of alternative pathway complement components by ecto- and endocervical cells which allows C3b deposition on gonococci and its rapid conversion to iC3b. Anti-iC3b and -factor I antibodies significantly inhibited adherence and invasion of primary cervical cells, suggesting that iC3b covalently bound to the gonococcus serves as a primary ligand for CR3 adherence. However, gonococcal porin and pili also bound to the I-domain of CR3 in a non-opsonic manner. Binding of porin and pili to CR3 were required for adherence to and invasion of cervical epithelia. Collectively, these data suggest that gonococcal adherence to CR3 occurs in a co-operative manner, which requires gonococcal iC3b-opsonization, porin and pilus. In conjunction, these mols. facilitate targeting to and successful infection of the cervical epithelium.
REFERENCE COUNT: 85 THERE ARE 85 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:585019 BIOSIS
DOCUMENT NUMBER: PREV200200585019
TITLE: Opsonic and non-opsonic interactions occur between Neisseria gonorrhoeae and complement receptor 3 on primary cervical epithelial cells.
AUTHOR(S): **Edwards, J. L. (1); Brown, E. J.;** Uk-Nham, S.; Cannon, J. G.; Blake, M. S.; Apicella, M. A. (1)
CORPORATE SOURCE: (1) University of Iowa, Iowa City, IA USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2002) Vol. 102, pp. 93. http://www.asmusa.org/mtgsrc/generalmeeting.htm. print.
Meeting Info.: 102nd General Meeting of the American Society for Microbiology Salt Lake City, UT, USA May 19-23, 2002 American Society for Microbiology . ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Little is known about the pathogenesis of gonococcal infection within the lower female genital tract. We recently described the distribution of complement receptor 3 (CR3) within epithelia derived from the female genital tract. CR3-mediated endocytosis was subsequently demonstrated to serve as a primary mechanism by which N. gonorrhoeae elicits membrane ruffling and cellular invasion of primary, human, cervical epithelial cells. We have extended these studies to describe the nature of the gonococcus-CR3 interaction. Western Blot analysis demonstrates production of alternative complement components by ecto- and endocervical cells, which allows

C3b deposition on gonococcal lipooligosaccharide (LOS) and its rapid conversion to iC3b. C3 opsonization is independent of the LOS sialylation state and of oligosaccharide side chain length. Quantitative adherence and invasion inhibition assays suggest that iC3b covalently bound to the gonococcus serves as a primary ligand for CR3 adherence, since recombinant I-domain and anti-iC3b and -factor I antibodies significantly inhibit adherence and invasion of primary ecto- and endocervical cells. However, gonococcal porin and pili can also bind to the I-domain of CR3 in a non-opsonic manner as demonstrated by ELISA and Western Blot analysis. The association of the gonococcus with CR3 requires por and pil outer membrane proteins. Although Opa proteins are not required for initiation of gonococcal cervicitis, they may play a role in potentiating infection. Collectively, these data suggest that opsonic and non-opsonic gonococcal adherence to CR3 occurs in a cooperative manner that facilitates targeting to and successful invasion of the cervical epithelium.

L31 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 3
ACCESSION NUMBER: 2001:711691 HCAPLUS
DOCUMENT NUMBER: 136:4467
TITLE: The role of complement receptor 3 (CR3) in Neisseria gonorrhoeae infection of human cervical epithelia
AUTHOR(S): **Edwards, Jennifer L.; Brown, Eric J.**; Ault, Kevin A.; Apicella, Michael A.
CORPORATE SOURCE: Department of Microbiology, University of Iowa, Iowa City, IA, 52242, USA
SOURCE: Cellular Microbiology (2001), 3(9), 611-622
CODEN: CEMIF5; ISSN: 1462-5814
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Neisseria gonorrhoeae is an important sexually transmitted pathogen and a major cofactor in HIV-1 infection. This organism uses different mechanisms to infect male and female genital tract epithelia. Receptor-mediated endocytosis of N. gonorrhoeae is the principle mechanism of entry into male urethral epithelial cells. Infection in men leads to a pronounced inflammatory response. In contrast, N. gonorrhoeae infection in women induces ruffling of the cervical epithelia, allowing a macropinocytic mechanism of entry. Infection in women is frequently asymptomatic, suggesting suppression of the inflammatory response. N. gonorrhoeae-induced membrane ruffling and inflammation suppression are consistent with the ability of this bacterium to enter cervical epithelial cells, in vitro and in vivo, by interaction with complement receptor 3 (CR3), a receptor that does not trigger an inflammatory response. This receptor is present on cervical epithelial cells but not on male urogenital tract epithelia. N. gonorrhoeae engagement of CR3 initiates a unique mechanism of bacterial-induced membrane ruffling and internalization. These studies explain why the pathol. of N. gonorrhoeae infection differs between males and females. Addnl., the observation that this receptor is present on cervical epithelia may provide insight into the pathogenesis of other sexually transmitted pathogens.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 5 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2002:201465 BIOSIS
DOCUMENT NUMBER: PREV200200201465
TITLE: Complement Receptor Type 3 (CR3) on primary cervical epithelial cells serves as a receptor for Neisseria gonorrhoeae.
AUTHOR(S): **Edwards, J. L. (1)**; Shao, J. (1); Ault, K. (1); **Brown, E.**; Apicella, M. A. (1)
CORPORATE SOURCE: (1) University of Iowa, Iowa City, IA USA
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2001) Vol. 101, pp. 303. http://www.asmusa.org/mtgsrc/generalmeeting.htm. print.
Meeting Info.: 101st General Meeting of the American Society for Microbiology Orlando, FL, USA May 20-24, 2001
ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Little is known about the pathogenesis of gonococcal infection in the lower female genital tract. We have previously shown that gonococci induce membrane ruffles upon infection of primary human cervical epithelial cells. The mechanism by which this is initiated is unclear. Complement Receptor Type 3 (CR3, CD11b/CD18)-mediated antigen internalization by macrophages and neutrophils is driven by actin rearrangements and occurs independently of a proinflammatory response. CR3 distribution is thought to be limited to immune cells; however, CR3 expression has been demonstrated in rectal epithelia. Microscopy and immuno-precipitation demonstrate CR3 expression in primary human cervical epithelial cells and its co-localization with N. gonorrhoeae. CR3 expression within the mucosal epithelium appears to decrease progressively from the cervix to the fallopian tubes. CR3 was not present in vas deferens or urethral tissue, primary male urethral cells, or immortalized genital epithelial cell lines (e. g. Me180, Hec1B, End1, HCK, and V428 cells). The gonococcal constituents, porin, opa, and pili co-precipitate with CR3. Attachment of gonococci to CR3-expressing K562 myeloid cells and invasion of CR3-transfected CHO cells can be inhibited by the presence of anti-CD11b antibody. Surface expression of CR3 increases in cervical cells in response to gonococcal infection. These studies suggest that CR3 serves as a receptor for N. gonorrhoeae during infection of the cervical epithelium. These studies also should aid other researchers studying host-parasite interactions of the human urogenital tract.

L31 ANSWER 6 OF 6 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1998-544514 [47] WPIDS
DOC. NO. NON-CPI: N1998-423994
TITLE: Ink jet printer containing head with jetting and substrate heaters - has two of enable line outputs coupled to second terminal of one jetting heater and second terminal of one substrate heater.
DERWENT CLASS: P75 T04
INVENTOR(S): **EDWARDS, J; GIBSON, B D;** PARISH, G K; EDWARDS, M J
PATENT ASSIGNEE(S): (LEXM-N) LEXMARK INT INC
COUNTRY COUNT: 29

Searcher : Shears 308-4994

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 873869	A2	19981028	(199847)*	EN	10
R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 10278271	A	19981020	(199901)		8
CN 1197731	A	19981104	(199912)		
KR 98080754	A	19981125	(200005)		
US 6102515	A	20000815	(200041)		
MX 9802411	A1	19990101	(200051)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 873869	A2	EP 1998-302393	19980327
JP 10278271	A	JP 1998-100461	19980327
CN 1197731	A	CN 1998-108079	19980327
KR 98080754	A	KR 1998-10666	19980327
US 6102515	A	US 1997-827404	19970327
MX 9802411	A1	MX 1998-2411	19980327

PRIORITY APPLN. INFO: US 1997-827404 19970327
AN 1998-544514 [47] WPIDS
AB EP 873869 A UPAB: 19981125
The head (10) includes a substrate (16), while a nozzle plate (12) has a number of ink emitting orifices (14). A number of jetting heaters (18) is located on the substrate and respectively associated with the number of ink emitting orifices. At least one substrate heater (20) is associated with the substrate. Each of the jetting heaters and the substrate heaters include first and second terminals. A print head driver (30) has a number of energisable outputs, each of which includes at least one power line output (P1 -P8) and at least two enable line outputs (A1-A13,BSHSEL).

One power line output is electrically connected to a first terminal of each of one the jetting heater and one the substrate heater. Two of the enable line outputs are coupled to a second terminal of the one jetting heater and a second terminal of the one substrate heater. During energising of the one power line output, one jetting heater and the one substrate heater may be selectively actuated by selectively energising the two enable line outputs.

ADVANTAGE - Allows selective actuating several of jetting heaters and/or substrate heater without use of separate driver of substrate heater.

Dwg.2/3

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